

Motion Control of a Transporter

Abstract

A transporter for transporting a subject over a surface that may be irregular. The
5 transporter includes a support platform for supporting a load, the loaded support platform
defining fore-aft and lateral planes and characterized by a load distribution. A plurality of
ground contacting elements are coupled to the support platform such that the transporter
is statically stable with respect to tipping in the fore-aft plane. At least one of the
plurality of ground contacting elements is driven by a motorized drive arrangement. A
10 sensor module generates a signal indicative of the load distribution. Based at least on the
load distribution, a controller commands the motorized drive arrangement.